

REMARKS

Claims 1-8 are pending in the above application. By the above amendment, claims 2-8 have been added.

The Office Action dated January 19, 2007, has been received and carefully reviewed. In that Office Action, claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Choi, and the IDS was objected to as being improper. Each of these issues is addressed below, and reconsideration and allowance of claim 1 and examination and allowance of claims 2-8 is respectfully requested in view of the following remarks.

INFORMATION DISCLOSURE STATEMENT

A new IDS to replace the April 7, 2005, IDS is being filed concurrently with this Reply.

REJECTIONS UNDER 35 U.S.C. 102(b)

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Choi. By the above amendment, claim 1 has been revised to more clearly indicate that a processing gas can be supplied to a reaction chamber by way of a gas reservoir or by way of a bypass line. Choi does not supply a processing gas from an MFC (near reference numeral 11 in Figure 1) to a reaction chamber. Instead, the processing gas is produced in source container 116. Therefore, Choi in no manner shows or suggest providing a processing using a bypass line as now recited in claim 1. Only a transfer gas could possibly be provided to a reaction chamber via the line that includes valve 114, rather than a processing gas as recited in claim 1, and Choi provides no indication that this should be done.

Furthermore, in Choi, the element identified as a "bypass line" by the examiner (the line between the MFC and valve 111 and proceeding through valve 114 in Figure 1) is not a line used to supply the transfer gas to the reactor 200 but a line for exhausting the transfer gas (column 1, lines 49-52). Therefore, Choi does not disclose or suggest a structure in which the processing gas is supplied to the reaction chamber by using the bypass line or a structure in which the processing gas is supplied to the reaction chamber by selecting one of the gas reservoir and the

bypass line and using the selected one as recited in claim 1. Claim 1 is submitted to be allowable over Choi for at least these reasons.

New claim 2 is also submitted to be allowable over Choi. Claim 2 recites an apparatus that includes a gas reservoir in fluid communication with a gas supply pipe for receiving a processing gas from a mass flow controller, storing the gas from the mass flow controller, and selectively releasing the processing gas to the reaction chamber. Choi's source container 116 does not receive a processing gas as recited in claim 2. Instead, Choi's source container 116 receives a transfer gas and produces a processing gas from liquid contained therein. Choi also does not show or suggest a control unit controlling at least one valve to selectively open a first path from a mass flow controller to the gas reservoir, a second path from the gas reservoir to the reaction chamber and a third path from the mass flow controller to the reaction chamber by way of a bypass line. Nothing in Choi suggests controlling the disclosed valves to supply a transfer gas to the reaction chamber by way of a bypass line as recited in claim 2. Claim 2 is submitted to further distinguish over Choi for at least these reasons.

Claims 3-5 depend from claim 2 and are submitted to be allowable over Choi for at least the same reasons as claim 2. Claim 3 further distinguishes over Choi by reciting a gas reservoir having an internal volume that is filled with a processing gas. Choi's source container 116 is partially filled with a liquid and is not filled with a processing gas as recited in claim 3. Claim 5 further distinguishes over Choi by reciting an apparatus having a configuration wherein a mass flow controller is connected to a reaction chamber by way of a bypass line and not by way of a gas reservoir. This configuration is not shown or suggested by Choi. Claim 5 is submitted to further distinguish over Choi for this reason.

Claim 6 defines a method that is also submitted to distinguish over Choi. Claim 6 recites steps of, inter alia, providing a reaction chamber forming a space for holding a substrate to be processed, providing a mass flow controller, placing a gas supply pipe in fluid communication with the mass flow controller and the reaction chamber, providing at least one valve in the gas supply pipe, providing a gas reservoir in fluid communication with the gas supply pipe and the reaction chamber, placing a bypass line in fluid communication with a first point in the gas supply pipe between the mass flow controller and the gas reservoir and a second point in the gas

supply pipe between the gas reservoir and the reaction chamber, the bypass line bypassing the gas reservoir, and controlling the mass flow controller to provide a processing gas to the first point and controlling the at least one valve to selectively place the mass flow controller in fluid communication with the gas reservoir and to selectively place the mass flow controller in fluid communication with the reaction chamber by way of the bypass line. The method disclosed by Choi in no manner suggests controlling at least one valve to selectively place a mass flow controller in fluid communication with a gas reservoir and to selectively place the mass flow controller in fluid communication with a reaction chamber by way of a bypass line. Claim 6 is submitted to be allowable over Choi for at least this reason.

Claims 7 and 8 depend from claim 6 and are submitted to be allowable for at least the same reasons as claim 6. Claim 7 further recites a step of providing a processing gas to a gas reservoir and releasing the processing gas from the gas reservoir. Choi does not show or suggest a step of providing a processing gas to a gas reservoir. Instead, Choi provides a transfer gas to a source container and releases a processing gas from the source container. Claim 7 further distinguishes over Choi for this reason.

Claim 8 recites a step of filling the internal volume of a gas reservoir with a processing gas. Choi discloses a source container partially filled with a liquid and in no manner suggest a step of filling an internal volume of a gas reservoir with a processing gas as claimed. Claim 8 further distinguishes over Choi for this reason.

CONCLUSION

Each issue raised in the Office Action dated January 19, 2007, has been addressed, and it is believed that claims 1-8 are in condition for allowance. Wherefore, reconsideration and allowance of these claims is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the examiner is respectfully requested to contact Scott Wakeman (Reg. No. 37,750) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/530,527
Amendment dated July 18, 2007
Reply to Office Action of January 19, 2007

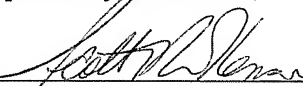
Docket No.: 2342-0139PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: July 18, 2007

Respectfully submitted,

By.

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